IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Patent Application of | | MAIL STOP APPEAL BRIEF - PATENTS | |
|-----------------------------|---|---|--|
| William R. Sweeney | | Group Art Unit: 3628 Examiner: Akiba K. Robinson | |
| Application No.: 10/729,968 | | | |
| Filed: | December 9, 2003 | Boyce | |
| For: | MODEL-BASED PROMOTION AND PRICE COMPUTATION SYSTEM AND METHOD | Appeal No.: | |

APPEAL BRIEF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This appeal is from the decision of the Primary Examiner dated July 13, 2010 finally rejecting claims 1, 3-14, 16, 19-25, 27, 30, 31, 33-37, 39, 42-46, which are reproduced as the Claims Appendix of this brief.

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The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

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I. Real Party in Interest

Philip Morris USA Inc. is the real party in interest, and is the assignee of Application No. 10/729,968.

II. Related Appeals and Interferences

The Appellant's legal representative, or assignee, does not know of any other appeal or interferences which will affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

III. Status of Claims

- A. There are 35 total claims currently pending in the application.
- B. Current status of the claims
 - 1. Claims canceled: 2, 15, 17, 18, 26, 28, 29, 32, 28, 40, and 41
 - 2. Claims withdrawn from consideration but not canceled: None
 - 3. Claims pending: 1, 3-14, 16, 19-25, 27, 30, 31, 33-37, 39, 42-46
 - 4. Claims allowed: None
 - 5. Claims rejected: 1, 3-14, 16, 19-25, 27, 30, 31, 33-37, 39,
 - 42-46
 - 6. Claims on appeal: 1, 3-14, 16, 19-25, 27, 30, 31, 33-37, 39,

IV. Status of Amendments

No Amendments were filed subsequent to the final Office Action dated July 13, 2010.

V. Summary of Claimed Subject Matter

Exemplary embodiments are directed to a system in which a retailer and manufacturer contribute information to a promotion and price computation model that calculates a retail price according to a sales contract (pgph 26). The manufacturer

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contributes promotion information, such as a "buy down" or "discount" data, and the retailer contributes price determination parameters (pgph 30). The promotion and price computation model <u>calculates a retail price</u> based on the aforementioned data. Promotion and price computation model implements a contractual promotional agreement between the retailer and the manufacturer based on the calculation (pgph 30). To monitor whether a retailer violates the promotional agreement, a control violation flag can be set by the system and later detected by the manufacturer during an audit of the retailers records in the system (pgph 61).

The table that follows maps Appellant's independent claims to those portions of the disclosure that support the recited feature.

| Claim # | Claim element | Support |
|---------|--|--------------------|
| | A method of providing model-based promotion and price computation in a system having a manufacturer computing device, a retailer computing device, a controller, a network and an auditing device, the method comprising the steps of: | pgph 26-28; Fig. 2 |
| | the manufacturer computing device providing promotion information to be considered in developing the promotion and price computation model wherein the promotion information includes a schedule that is encrypted; | pgph 35 |
| 1 | the retailer computing device providing price determination parameters to develop the promotion and price computation model based on the schedule of the promotion information, wherein the retailer decrypts the schedule received from the manufacturer computing device on a segment-by-segment basis such that only information from a current segment is decrypted; | pgph 36 |
| | developing in the controller that the promotion and price computation model from the promotion information provided by the manufacturer computing device and the price determination parameters provided by the retailer computing device to implement a promotion; | pgph 37 |
| | calculating in the controller a retail price based on information provided by the promotion and price computation model; and | pgph 37 |
| | auditing of improperly implemented promotions. | pgph 61 |

| | A system for model-based promotion and price computation, comprising: a sales controller in communication with a retailer computing device and a manufacturer computing device; and | pgph 39 |
|----|--|-------------|
| | a sales device in communication with the retailer computing device and the sales controller; | pgph 41 |
| 21 | wherein the sales controller is configured to receive promotion information from the manufacturer computing device and price determination parameters from the retailer computing device to calculate a retail price and implement a promotion, wherein the promotion information includes a promotion schedule that is encrypted at the manufacturer computing device, and the sales controller decrypts the promotion schedule on a segment-by-segment basis such that only information from a current segment is decrypted; | pgph 42, 43 |
| | wherein the sales device is configured to receive the retail price from the sales controller; and | pgph 42 |
| | wherein the sales controller is configured to audit improperly implemented promotions and send audit reports to the manufacturer computing device. | pgph 50 |

VI. Grounds of Rejection to be Reviewed on Appeal

Whether:

- A. Claims 1-10, 16, 19-20, 31-33, 42-45 are unpatentable under 35 U.S.C. § 103(a) over *Schroeder et al.* (US 2003/0130883) in view of *Failing, Jr. et al.* (US 5,448,226) and further in view of *Werner* (US 2002/0069107); and
- B. Claims 21-25, 27, and 30 are rejected under 35 U.S.C. §103(a) are unpatentable over *Teicher et al* (U.S. Patent No. 5,933,813) in view of *Failing, Jr.* and further in view of *Werner*.

VII. Argument

- A. Claims 1-10, 16, 19-20, 31-33, 42-45 are patentable over the applied art
 - 1. <u>Independent claims 1 and 31 are distinguishable because the applied art fails to disclose or suggest the calculation of a "retail price"</u>

Each of independent claims 1 and 31 recite, among other features, calculating in the controller a <u>retail price</u> based on information provided by the promotion and price computation model (Emphasis added).

Based on the guidance provided in Appellant's disclosure, one of ordinary skill would understand that the retail price is the monetary value at which goods are presented to and/or sold to consumers. For example, paragraph 33 the specification provides that "the ability of the retailer 10 to institute internal promotions or price reductions does not affect or impair the ability of the manufacturer 12 to institute manufacturer-based promotions, by way of the price computation model 28, that pass additional savings to a consumer by lowering the <u>retail price 30 paid by the consumer</u>" (Emphasis added).

The Examiner alleges that *Schroeder* discloses the calculation of retail price since the retail price is included in the information of a proposed promotion. *See*Advisory Action, November 3, 2010. However, there is nothing in *Schroeder* that suggests or contemplates anything more than a system and method that projects the likely success of a proposed sales promotion.

As provided in paragraphs 18-28, *Schroeder* discloses that a promotion can include the following:

- 1. A temporary price reduction
- 2. Rewards from multiple purchases
- 3. Commercial advertising

- 5. Loyalty card promotions
- 6. Coupon promotions
- 7. Temporary increased value systems
- 8. Sweepstakes
- 9. Rebate programs
- 10. Broadcasting promotions

Moreover, *Schroeder* discloses that the method and system can predict the profit attributable to a proposed sales promotion of a product. The proposed promotions are entered into a computer program that runs a sales lift model based on a prediction of increased <u>sales</u> to determine a set of promotion conditions. The system uses historical databases of <u>sales</u> for a variety of promotion conditions and predicts how planned promotions will affect sales in a particular store. In particular, the lift model can be used to predict sales, sales lift, and profit. *See* <u>Schroeder</u>, pgph 59.

In paragraph 69, *Schroeder* discusses a technique for determine <u>a unit price</u> <u>paid by the retailer</u> (to the manufacturer) for use in a model predicting retailer profit.

This <u>unit price</u> can be a time-dependent variable whose value at a given time is projected by the manufacturer based on forecasts of material costs and other factors. The <u>unit price</u> can also be determined by the manufacturer in a data base as a function of retailer volume, and incorporating volume discounts, among other factors. The <u>unit price</u> can also be determined based on contractural arrangements between the manufacturer and the retailer, or the <u>unit price</u> can be offered as a tentative prediction responsive to input from the retailer (with emphasis). *See* Schroeder.

Furthermore, in paragraph 79, *Schroeder* defines costs as the "funds required for a promotion or plan", and the planned promotion can be approved or modified based on the calculated cost. *Schroeder* adds that "actual costs" are those costs that accumulate during execution of the promotion or plan, such as through paying bills or through off-invoice allowances (emphasis added). The "actual costs" are used for plan evaluation to improve the return on investment for successive promotions. *Schroeder* discusses the prediction of costs incurred by the retailer in executing the promotion. These predicted costs, however, are still not analogous to Appellant's claimed "retail price".

Based on the guidance provided by *Schroeder*, one skilled in the art would have understood that while *Schroeder* does disclose the calculation of a <u>unit price</u>, the determination of sales, and prediction of costs incurred by the retailer in executing the promotion, these actions or determinations in no way suggests that a <u>retail price</u> is calculated to predict the retailer's profit. Rather, based on the disclosure (a discussion of which appears above) the "retail price" is already known and/or provided to the computation model so that the success of the promotion can be predicted. *Schroeder* does not disclose that a retail price is calculated based on the promotion information and a price computation model as is recited in independent claims 1 and 31.

Failing, Jr. is alleged to remedy the deficiencies of Schroeder concerning, "auditing of improperly implemented promotions" as recited in independent claims 1 and 31. Failing, Jr. discloses a system having a central store computer and multiple ESL-mounted shelf talkers, which are signs, cards, or other printed material placed at the shelf location. The system includes sensors to detect the presence of shelf talkers. An audit is performed to determine which products are on promotion, the

start and end dates of the promotion, and the status of whether or not shelf talkers are installed.

Nothing in *Failing, Jr.*, suggests or is related to the calculation of a retail price. Thus, even if the combining of *Failing Jr.* and *Schroeder* is reasonable, this combination does not disclose calculating retail price as recited in the claims. More importantly, even if *Failing Jr.* can reasonably be interpreted to include a retail price calculation as alleged, which Appellant does not believe that it does, there is nothing in either of these references that suggests the calculation of this retail price based on information provided by the promotion and price computation model, as recited in Appellant's claims.

The Examiner acknowledges that the combination of *Schroeder* and *Failing*, *Jr.* fails to disclose or suggest the use of a schedule that is encrypted and decrypting the schedule on a segment-by-segment basis. *Werner* is relied upon in an effort to remedy this deficiency.

While not acquiescing to the asserted teachings of *Werner*, Appellant respectfully submits that this reference does not disclose or suggest the calculation of retail price, and therefore fails to remedy the deficiencies of *Schroeder* and *Failing, Jr.* as it concerns independent claims 1 and 31.

In summary, *Schroeder*, *Failing*, *Jr.*, and *Werner* when applied individually or collectively fail to disclose or suggest every feature and/or the combination of features recited in Appellant's claims. Thus, a *prima facie* case of obviousness has not been established. Based on the foregoing discussion and the established deficiencies in the applied art, Appellant requests that this rejection be overturned.

2. <u>Dependent claims 3-10, 16, 19, 20, 32, 33, and 42-45 are not obvious over the prior art combination</u>

The aforementioned claims depend from one of claims 1 and 31, where applicable. These claims are likewise distinguishable over the combination of *Schroeder*, *Failing*, *Jr.*, and *Werner* based on the remarks discussed above with regard to claims 1 and 31, and because of the respective additional features recited therein. As a result, Appellant submits that this rejection should not be sustained.

B. The prior art combination does not render claims 21-25, 27, and 30 obvious

1.

Independent claim 21 recites, among other features, a sales controller in

Independent claim 21 is distinguishable over the prior art combination

communication with a retailer computing device and a manufacturer computing device, wherein the sales controller is configured to receive promotion information

from the manufacturer computing device and price determination parameters from

the retailer computing device to calculate a retail price and implement a promotion.

In contrast, *Teicher* discloses a sales promotion data processor system in which a merchant 100 communicates with a store computer system 101 through a merchant interface 102. The merchant interface 102 provides the store computer system 101 with cost information regarding the various products offered for sale by the store. The merchant interface also provides basic price information regarding the normal price for the merchandise items. The computer system 101 includes storage devices that store predetermined criteria used to determine sales promotion prices of the products offered for sale. *See* Teicher, col. 3, II. 57-67. The computer system 101 is connected to communicate with point of sale sensor units, which

sense each product presented at the respective point of sale unit and generate purchase data identifying the sold products. <u>Id.</u>, col. 4, II. 17-20.

The system recited in claim 21 provides that a sales controller can determine a price for an item based on information input from both a manufacturer and a retailer (i.e., merchant). In contrast, Teicher describes a process in which a merchant can remotely control and monitor the sales price and promotion of goods sold at individual stores of the merchant. *Teicher* neither discusses nor appears to contemplate a feature in which the sales price of a good is calculated based on "promotion information received from a manufacturer computing device and price determination parameters from a retailer computing device". As provided in Appellant's disclosure, the price determination parameters can include profit margins, internal promotions, discounts according to volume or velocity of sales, or taxes. See Appellant's disclosure, pgph 36. Moreover, "promotion information" is described in the disclosure as a "manufacturer buydown or discount" (pgph 30).

Neither Failing, Jr. and/or Werner describes or suggests features that remedy the deficiencies of Teicher. Thus, the combination of Teicher, Failing, Jr., and Werner does not establish a prima facie case of obviousness, such that this rejection should not be sustained.

2. Dependent claims 22-25, 27, and 30 are not obvious over the prior art combination

Each of claims 22-25, 27, and 30 depend from claim 21. By virtue of this dependency, these claims are likewise distinguishable over the combination of Tischer, Failing, Jr., and Werner based on the remarks discussed above with regard to claim 21. Furthermore, these claims are further distinguishable over the applied

references because of the additional features recited therein, respectively. As a result, Appellant requests that this rejection be overturned.

VIII. Claims Appendix

See attached Claims Appendix for a copy of the claims involved in the Appeal.

IX. **Evidence Appendix**

No evidentiary exhibits are provided with this Appeal.

X. Related Proceedings Appendix

No related proceedings are associated with this Appeal.

XI. Conclusion

Appellant has pointed to errors in the rejection of the claims. Appellant respectfully requests that the final rejection be reversed and the application be returned to the Examiner for prompt allowance.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date February 11, 2011 By: /Shawn B. Cage/

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VIII. CLAIMS APPENDIX

The Appealed Claims

1. A method of providing model-based promotion and price computation in a system having a manufacturer computing device, a retailer computing device, a controller, a network and an auditing device, the method comprising the steps of:

the manufacturer computing device providing promotion information to be considered in developing the promotion and price computation model wherein the promotion information includes a schedule that is encrypted;

the retailer computing device providing price determination parameters to develop the promotion and price computation model based on the schedule of the promotion information, wherein the retailer decrypts the schedule received from the manufacturer computing device on a segment-by-segment basis such that only information from a current segment is decrypted;

developing in the controller that the promotion and price computation model from the promotion information provided by the manufacturer computing device and the price determination parameters provided by the retailer computing device to implement a promotion;

calculating in the controller a retail price based on information provided by the promotion and price computation model; and

auditing of improperly implemented promotions.

3. The method of claim 1, further comprising the step of: updating the retail price based upon additional information provided by the retailer computing device.

- 4. The method of claim 3, wherein the additional information comprises additional promotion information provided by the manufacturer computing device.
- 5. The method of claim 3, wherein the additional information comprises additional price determination parameters provided by the retailer computing device.
- 6. The method of claim 3, wherein the step of updating comprises performing real-time updates of the retail price based upon the additional information, wherein the additional information comprises information received on a real-time basis.
- 7. The method of claim 6, wherein the information received on a real-time basis comprises real-time promotion information received from the manufacturer computing device.
- 8. The method of claim 6, wherein the information received at the controller on a real-time basis comprises real-time price determination parameters received from the retailer computing device.
- 9. The method of claim 1, further comprising the step of: displaying the retail price on a retail display device.
- 10. The method of claim 9, further comprising the step of: updating the retail price based upon additional information provided by the retailer computing device.

- 11. The method of claim 10, wherein the step of updating is performed automatically in response to either additional promotion information provided by the manufacturer computing device or additional price determination parameters provided by the retailer computing device.
- 12. The method of claim 11, wherein the step of automatically updating is performed on a real-time basis.
- 13. The method of claim 11, wherein the automatically updated retail price is passed to a look up table accessible to display devices and point-of-sale devices.
- 14. The method of claim 11, wherein the automatically updated retail price is passed directly to display devices and point-of-sale devices.
- 16. The method of claim 1, wherein the promotion schedule is stored in a table.
- 19. The method of claim 1, wherein the decryption on a segment-by-segment basis occurs according to a segment selected from the group consisting of: a time segment, a date segment, and a promotion type segment.

- 20. The method of claim 1, wherein the decryption occurs by way of decryption keys for each segment that are passed to the retailer on a just-in-time basis.
- 21. A system for model-based promotion and price computation, comprising:

a sales controller in communication with a retailer computing device and a manufacturer computing device; and

a sales device in communication with the retailer computing device and the sales controller;

wherein the sales controller is configured to receive promotion information from the manufacturer computing device and price determination parameters from the retailer computing device to calculate a retail price and implement a promotion, wherein the promotion information includes a promotion schedule that is encrypted at the manufacturer computing device, and the sales controller decrypts the promotion schedule on a segment-by-segment basis such that only information from a current segment is decrypted;

wherein the sales device is configured to receive the retail price from the sales controller; and

wherein the sales controller is configured to audit improperly implemented promotions and send audit reports to the manufacturer computing device.

22. The system of claim 21, further comprising a display controller configured to control a plurality of display devices for displaying the detail price.

- 23. The system of claim 22, further comprising at least one display device for displaying the retail price communicated from the display controller.
- 24. The system of claim 23, further comprising a look-up table generated by the sales controller for indicating the retail price to be displayed by the at least one display device.
- 25. The system of claim 24, wherein the sales device comprises a point-of-sale (POS) device that accesses the look-up table to determine the retail price to charge.
- 27. The system of claim 21, wherein the promotion schedule is stored in a table.
- 30. The system of claim 21, wherein the promotion schedule may be decrypted by decryption keys received by the sales controller on a just-in time basis.
- 31. A computer readable medium encoded with a program that provides model-based promotion and price computation which that when loaded into a computer the computer readable medium causes the computer to execute method comprising series of steps to be performed by a computing device stored on a computer readable medium, comprising the steps of:

receiving promotion information to be considered in developing a promotion and price computation model wherein the received promotion information is encrypted and includes a promotion schedule;

receiving price determination parameters to develop the promotion and price computation model;

decrypting the promotion schedule on a segment-by-segment basis such that only a current schedule of the encrypted promotion schedule is decrypted;

developing the promotion and price computation model from the received promotion information and the price determination parameters to implement a promotion, wherein the promotion and price computation model establish an agreement between the manufacturer and the retailer;

calculating a retail price according to the developed promotion and price computation model developed; and

auditing of improperly implemented promotions based on the agreement.

33. The method computer readable medium of claim 31, further comprising the steps of:

receiving updated promotion information or price determination parameters; and

updating the retail price by repeating the steps of developing and setting according to the updated promotion information or price determination parameters.

34. The method computer readable medium of claim 33, further comprising the step of:

providing the updated price to a display controller and a sales controller.

35. The method computer readable medium of claim 34, wherein the steps of updating and providing are performed on an as-needed basis.

- 36. The method computer readable medium of claim 34, wherein the steps of updating and providing are performed upon request.
- 37. The method computer readable medium of claim 34, wherein the steps of updating and providing are performed on a real-time basis.
- 39. The method computer readable medium of claim 31, wherein the promotion schedule is stored in a table.
- 42. The method computer readable medium of claim 31, wherein the decryption on a segment-by-segment basis occurs according to a segment selected from the group consisting of:

a time segment, a date segment, and a promotion type segment.

- 43. The method computer readable medium of claim 31, wherein the decryption occurs by way of decryption keys for each segment that are passed to the retailer on a just-in-time basis.
- 44. The method of claim 1, further comprising the retailer bypassing the promotion and price computation model and manually setting the retail price.
- 45. The system of claim 21, wherein the system determines whether a promotion has been improperly implemented on the basis of a contract violation.

| 46. | The method computer readable medium of claim 31, further comprising |
|--------------|---|
| the retailer | bypassing the promotion and price computation model and manually |
| setting the | retail price. |
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IX. EVIDENCE APPENDIX

No evidentiary exhibits are provided with this Appeal.

X. RELATED PROCEEDINGS APPENDIX

No related proceedings are associated with this Appeal.